

guns, which are often very hard for law enforcement agencies to trace. It would significantly increase penalties for gun runners caught trafficking large numbers of firearms. It would establish a national system, as soon as it's feasible, to limit handgun purchases to one a month, following the lead of Virginia.

You know, I've got to say—this is very interesting. When we were going over the list of things we wanted to propose, some people said, "Well, that might be a loser because it sounds to people who care about this like that's too many, and what is this?" You know, the States that have had big problems in the past, with lots of illegal gun purchases and guns then being used for illegal purposes—Virginia did this, and it really helped them. This was a big deal. And I just talked to Senator Robb about this a couple days ago, and he said, "You know, all I can tell you is it's working in our State." So I would ask you to seriously consider what this might mean for our efforts to control the law enforcement aspects of this.

So these are the things that I wanted to say. But I hope you'll remember what I said to you about the culture. We do have to keep working on the culture. Hillary's right about it. Al and Tipper Gore are right about it. We've got a lot of responsibilities. We've got to keep working on the services for kids. We've even got to work on helping parents actually communicate with their children.

One Senator called me the night before last and said he'd had a town meeting in his State with children. And he asked how many of the schoolchildren had actually talked to their parents about what happened in Littleton. And only 10 percent of the kids raised their hands. And one child said, "I had to go and turn off the television and tell my parents we were going to talk about it." She said, "They're just scared. They're scared. They didn't know how to talk about it."

So there are all these cultural issues. And then there's this big cultural issue of the gun and sport hunting culture. And I hope that—a lot of my folks at home might take offense at what I said today, but I'm trying to help explain them to you. And I felt comfortable taking on these issues, and I thought maybe I was in a unique position to take on all these gun issues all these years because of where I grew up and because I understand how people think who don't agree with this.

But I'm telling you, we've got to keep working until people start thinking about this stuff the same way they think about x rays and metal detectors at airports. That's the goal. We have to redefine the national community so that we have a shared obligation to save children's lives. And we've got to get out of this crazy denial that this won't make a difference. It's crazy; it won't make—just because it won't make all the difference doesn't mean it won't make a difference. It will make a difference.

I implore you to remember what these Members have said. I implore you to go out and get people going at the grassroots, as Carolyn McCarthy said. We need help. We can pass all this if the American people want it bad enough. We can pass it all if the American people want it badly enough. And we don't need to go through another Littleton for the American people to want it badly enough. You can help make sure that happens.

Thank you.

NOTE: The President spoke at 1:15 p.m. in Presidential Hall (formerly Room 450) in the Old Executive Office Building. In his remarks, he referred to Mayor Paul Helmke of Fort Wayne, IN; and Bob Walker, president, Handgun Control, Inc., and the Center to Prevent Handgun Violence. The transcript released by the Office of the Press Secretary also included the remarks of First Lady Hillary Clinton.

Remarks on Presenting the National Medals of Science and Technology April 27, 1999

The President. Thank you very much. I want to begin by thanking Neal Lane and Secretary Daley for the terrific job they do for our admin-

istration every day and for the American people. I also want to welcome the two eminently qualified Members of Congress to be here, Senator

Bill Frist, a distinguished physician, and Representative Rush Holt, our only bona fide scientist in the United States Congress, and it's about time we had one, and I'm glad they're both here. *[Laughter]*

Each year, I look forward to presenting these medals because they show again that America's future is flowering as a result of the work of the honorees and people like them all over our country. I suppose I am living proof, when I come here every year, that it is possible for a person to love and support those things which he does not fully understand. *[Laughter]* Indeed, one of the reasons that I asked Al Gore to join the ticket with me in 1992 was that I felt that the work you do would shape the future of America, and I thought there ought to be somebody here in the White House who knew more about it than I did. In the years since, I've done my best to be a good student.

One of the things that impresses me is the nature of the work that all of you do, although it is very different. I was deeply moved when I read as a young man what Albert Einstein said when he said, "I think and think for months and years. Ninety-nine times, the conclusion is false. The hundredth time, I am right." I wonder how many of you, day and night, perhaps fueled by lukewarm coffee or kept awake by stubborn puzzles, have waited for that hundredth time. We are very glad that you made the effort.

You have sought answers to questions that few Americans can even begin to understand, or others people ask but can't answer, questions about neutrino physics and plant genetics, about polymer composites and urban poverty. Your success in illuminating the hows and whys of our world and raising the quality of human existence have helped make the time in which we live perhaps the most exciting in human history. I am humbled by your achievements and honored to present these medals to you.

I'd like to take just a moment to reaffirm something that is obvious to all of you but needs to be equally clear to your fellow Americans. In an age when the entire store of knowledge doubles every 5 years, where prosperity depends upon command of that ever-growing store, the United States is the strongest it has ever been, thanks in large measure to the remarkable pace and scope of American science and technology in the last 50 years.

Our scientific progress has been fueled by a unique partnership between government, academia, and the private sector. Our Constitution actually promotes the progress of what the Founders called "science and the useful arts." The partnership deepened with the founding of land grant universities in the 1860's. After World War II, President Roosevelt directed his science adviser, Vannevar Bush, to determine how the remarkable wartime research partnership between universities and the Government could be sustained in peace. "New frontiers of the mind are before us," Roosevelt said. "If they are pioneered with the same vision, boldness, and drive with which we have waged the war, we can create a fuller and more fruitful employment and a fuller and more fruitful life." Perhaps no Presidential prophecy has ever been more accurate.

Vannevar Bush helped to convince the American people that Government must support science, that the best way to do it would be to fund the work of independent university researchers. This ensured that, in our Nation, scientists would be in charge of science. And where before university science relied largely on philanthropic organizations for support, now the National Government would be a strong and steady partner.

This commitment has helped to transform our system of higher education into the world's best. It has kindled a half century of creativity and productivity in our university life. Well beyond the walls of academia, it has helped to shape the world in which we live and the world in which we work. Biotechnology, modern telecommunications, the Internet, all had their genesis in university labs, in recombinant DNA work, in laser and fiber optic research, in the development of the first web-browser.

It is shaping the way we see the universe. Just last week, astronomers at San Francisco State University, whose work was supported by the National Science Foundation, announced they had detected a solar system of three large planets orbiting the star Upsilon Andromedae. This suggests strongly that there are billions of planets in the universe, some of them undoubtedly very much like Earth. Now, on my bad days here, that's a very sobering thought—*[laughter]*—but quite an exciting one.

It is shaping the way we see ourselves, both in a literal and in an imaginative way. Brain imaging is revealing how we think and process

knowledge. We are isolating the genes that cause disease from cystic fibrosis to breast cancer. Soon we will have mapped the entire human genome, unveiling the very blueprint of human life. Meanwhile, I want to compliment the committee on recognizing today the role of social science in honoring William Julius Wilson, whose work has deeply influenced what I have tried to do as President, to bring the benefits of work to people too long denied them.

Today, because of this alliance between Government and the academy, we are, indeed, enjoying fuller and more fruitful lives. With only a few months left in the millennium, the time has come to renew the alliance between America and its universities, to modernize our partnership to be ready to meet the challenges of the next century.

Three years ago I directed my National Science and Technology Council to look into and report back to me on how to meet this challenge. Today I'm pleased to present their findings.

The report makes three major recommendations. First, we must move past today's patchwork of rules and regulations and develop a new vision for the university/Federal Government partnership. Vice President Gore has proposed a new compact between our scientific community and our Government, one based on rigorous support for science and a shared responsibility to shape our breakthroughs into a force for progress. Today I ask the National Science and Technology Council to work with universities to write a statement of principles to guide this partnership into the future.

Next, we must recognize that Federal grants support not only scientists but also the university students with whom they work. The students are the foot soldiers of science. Though they are paid for their work, they are also learning and conducting research essential to their own degree programs. That is why we must ensure that Government regulations do not enforce artificial distinctions between students and employees. Our young people must be able to fulfill their dual roles as learners and research workers.

And I ask all of you to work with me, every one of you, to get more of our young people, especially our minorities and women students, to work in our research fields. Over the next decade, minorities will represent half of all of our school-age children. If we want to maintain

our continued leadership in science and technology well into the next century, we simply must increase our ability to benefit from their talents, as well.

Finally, America's scientists should spend more time on research, not filling out forms in triplicate. Therefore, I direct the NSTC to redouble their efforts to cut down the redtape, to streamline the administrative burden of our partnership.

These steps will bring Federal support for science into the 21st century. But they will not substitute for the most basic commitment we need to make. We must continue to expand our support for basic research.

You know, one of Clinton's laws of politics—not science, mind you—is that whenever someone looks you in the eye and says, “This is not a money problem,” they are almost certainly talking about someone else's problem. [*Laughter*]

Half of all basic research, research not immediately transferable to commerce but essential to progress, is conducted in our universities. For the past 6 years we have consistently increased our investment in these areas. Last year, as a part of our millennial observation to honor the past and imagine the future, we launched the 21st century research fund, the largest investment in civilian research and development in our history. In my most recent balanced budget, I proposed new information technology initiative to help all disciplines take advantage of the latest advances in computing research.

Unfortunately, the resolution on the budget passed by Congress earlier this month shortchanges that proposal and undermines research partnerships with NASA, the National Science Foundation, and the Department of Energy. This is no time to step off the path to progress and scientific research. So I ask all of you, as leaders of your community, to build support for these essential initiatives. Let's make sure the last budget of this century prepares our Nation well for the century to come.

From its birth, we have been built by bold, restless, searching people. We have always sought new frontiers. The spirit of America is, in that sense, truly the spirit of scientific inquiry.

Vannevar Bush once wrote that “science has a simple faith which transcends utility . . . the faith that it is the privilege of man to learn to understand and that this is his mission . . . Knowledge for the sake of understanding, not

merely to prevail, that is the essence of our being. None can define its limits or set its ultimate boundaries.”

I thank all of you for living that faith, for expanding our limits and broadening our boundaries. I thank you—through both anonymity and acclaim, through times of stress and strain as well as times of triumph—for carrying on this fundamental human mission.

Major Williams, please read the citations.

[At this point, Maj. Darryl Williams, USA, Army Aide to the President, read the citations, and the President presented the medals.]

The President. Thank you, Major. Thank you, ladies and gentlemen. Congratulations again. We’re adjourned. Thank you.

NOTE: The President spoke at 3:08 p.m. in the East Room at the White House. In his remarks, he referred to 1998 National Medal of Science recipient William Julius Wilson.

Memorandum on Renewing the Federal Government-University Research Partnership for the 21st Century

April 27, 1999

Memorandum for the National Science and Technology Council

Subject: Renewing the Federal Government-University Research Partnership for the 21st Century

Federal investments in university research are critically important to the Nation, helping foster the discovery of knowledge, stimulating technological innovation, improving the quality of life, and contributing to America’s economic prosperity. Universities also have the unique role of educating and training the next generation of scientists and engineers. Indeed, the integration of research and education is the hallmark of the American university system, which many nations now seek to emulate. Beginning with the visionary establishment of the land grant universities by President Lincoln in 1862 and continuing with President Truman’s effort to redouble our Nation’s commitment to university-sponsored research and education by the establishment of the National Science Foundation, the partnership that has evolved between the Federal Government and our Nation’s system of research universities has served us well by any measure of success.

However, with the end of the Cold War and the globalization of the world’s economy, it became apparent that the future success of the partnership cannot be taken for granted. That is why I directed the National Science and Technology Council (NSTC) to assess the current state of the partnership and recommend

ways to strengthen it. The resulting report on *Renewing the Federal Government-University Research Partnership for the 21st Century* finds that the partnership is fundamentally sound, but that it can still be improved. Therefore, I direct as follows:

1. The NSTC, in consultation with research universities and other stakeholders in the Federal science and technology enterprise, shall develop a statement of principles that clearly articulates the roles, responsibilities, and expectations of each of the partners and establishes a framework for addressing future issues as they arise. Ultimately, this statement of principles will serve to shape future discussions and guide policy development and decision making.

2. The NSTC shall develop recommendations to better support the integration of research and education in Government policies and practice. The vital and dual roles of students (undergraduates as well as graduates), as both researchers who contribute to the national research enterprise and as students who gain research experience as part of their training, must be recognized and reflected in Government and university policies and practices.

3. The NSTC shall propose specific actions by member agencies to make the partnership more effective and efficient. These actions should be aimed at fostering a productive policy, regulatory, and administrative environment and promoting cost and administrative efficiencies while maintaining accountability for public funds.